



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION VII
901 NORTH 5TH STREET
KANSAS CITY, KANSAS 66101

June 6, 2001

Junior Flowers
Missouri Tie and Timber
Highway 72 West
Reynolds, MO 63666

Re: Transmittal of Analytical Results
Missouri Tie and Timber
RCRA ID No. Non-notifier

Dear Mr. Flowers:

Enclosed you will find copies of the analytical results from the waste, soil, drinking and surface water samples that were collected at the above-referenced facility on March 7, 2001, by the U.S. Environmental Protection Agency. In addition, I have enclosed a copy of Missouri Department of Natural Resources *Used Oil and Oil-Contaminated Waste* Technical Bulletin for your information.

If you have any questions regarding this information, please contact me at (913) 551-7049.

Sincerely,

Dedriel Newsome
Environmental Engineer
Air and RCRA Compliance Branch
Environmental Services Division

Enclosure

cc: K. Flippin, MDNR (w/ encl)
Gary Gaines, MDNR Southeast Regional Office



R00182471

RCRA RECORDS CENTER



United States Environmental Protection Agency

**Region 7 Laboratory
25 Funston Road
Kansas City, KS 66115**

Date: 4/6/2001

Subject: Transmittal of Sample Analysis Results for ASR #: 827

Activity Number: DLN14

Activity Description: Missouri Tie and Timber

From: Michael Thomas, Associate Laboratory Director 
Regional Laboratory, Environmental Services Division

To: Dedriel Newsome
ENSV/ARCM

This is the sample analysis results transmittal for the above-referenced Analytical Services Request (ASR). The data contained in this transmittal have been approved by the Regional Laboratory. This transmittal contains all of the sample analysis results for this ASR. The Regional Laboratory should be notified within 14 days if any changes are needed to the contents of this report. If you have any questions, comments or data changes, please contact the Laboratory Customer Service Department at 913-551-5295.

cc: Analytical Data File

ASR Number: 827

Summary of Activity Information

4/6/2001

Activity Leader: Newsome, Dedriel

Org: ENSV/ARCM

Phone: (913) 551-7049

Activity Number: DLN14

Activity Desc: Missouri Tie and Timber

Location: Bunker

State: Missouri

Type: RCRA

Purpose: Enforcement

Explanation of Codes, Units and Qualifiers used on this report.

Sample QC Codes: QC Codes identify the type of sample for quality control

___ = Field Sample
FD = Field Duplicate

Units: Specific units in which results are reported.

Deg C = Degrees Celsius
mg/kg = Milligrams per Kilogram
mg/L = Milligrams per Liter
SU = Standard Units (pH)
ug/kg = Micrograms per Kilogram
ug/L = Micrograms per Liter

Data Qualifiers: Specific codes used in conjunction with data values to provide additional information on the quality of reported results, or used to explain the absence of a specific value.

(Blank) = Values have been reviewed and found acceptable for use.
K = Actual value of the sample is less than the value reported.
L = Actual value of the sample is greater than the value reported.
U = Not detected at or above the reportable level shown.

Activity Number: DLN14

ASR Number: 827

Sample Information Summary

Activity Desc: Missouri Tie and Timber

4/6/2001

Sample Numbe	QC Code	Matrix	Location	External Sample No.	Start Date	Start Time	End Date	End Time	Receipt Date
100 - __		Hazardous	Drip pad waste from drip pad collection system taken near South wall near RR tracks on West side		03/07/2001	13:45	03/07/2001	13:46	03/08/2001
101 - __		Soil	T-Building wood storage area sample taken in drop areas		03/07/2001	14:00	03/07/2001	14:05	03/08/2001
101 - FD		Soil	T-Building wood storage area/Duplicate of sample 101		03/07/2001	14:00	03/07/2001	14:05	03/08/2001
102 - __		Soil	Background soil sample taken approx. 100 yds. South of office bldg.		03/07/2001	14:20	03/07/2001	14:25	03/08/2001
205 - __		Water	Collection Pond water sample		03/07/2001	16:05	03/07/2001	16:18	03/08/2001
208 - __		Water	Drinking water from on-site well near boiler		03/07/2001	15:50	03/07/2001	15:57	03/08/2001

Analysis	Comments About Results For This Analysis
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TCLP Semi-Volatiles in Hazardous

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3-methylphenol is not reported individually.

TCLP Semi-Volatiles in Soil

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3-methylphenol is not reported individually.

Total Metals Analysis of TCLP Metals in Soil by ICAP

Slight chromium contamination was found in the laboratory method blank. Only samples containing this compound at a level greater than five times the contamination level of the blank are reported without being qualified. All samples that contained this compound but at a level less than five times the contamination in the blank have the result "U-coded" indicating the method reporting limit has been raised to the level found in the sample. Samples affected were 827-101 and 827-101FD.

Total Semivolatiles of TCLP compounds in Hazardous Waste

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3-methylphenol is not reported individually.

Total Semivolatiles of TCLP compounds in Solids

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3-methylphenol is not reported individually.

Activity Number: DLN14

ASR Number: 827

RLAB Approved Sample Analysis Results

Activity Desc: Missouri Tie and Timber

4/6/2001

Analysis / Analyte	Units	100-__	101-__	101-FD	102-__
Flashpoint of Hazardous Samples					
Flashpoint	Deg C	79	L		
pH of Hazardous Sample					
pH	SU	6.7			
TCLP Metals in Haz. Waste					
Arsenic	mg/L	0.025	U		
Barium	mg/L	0.08			
Cadmium	mg/L	0.005	U		
Chromium	mg/L	0.005	U		
Lead	mg/L	0.025	U		
Selenium	mg/L	0.05	U		
Silver	mg/L	0.005	U		
TCLP Semi-Volatiles in Hazardous					
1,4-Dichlorobenzene	mg/L	0.00064	U		
2,4-Dinitrotoluene	mg/L	0.00073	U		
Hexachlorobenzene	mg/L	0.0005	U		
Hexachlorobutadiene	mg/L	0.00059	U		
Hexachloroethane	mg/L	0.00071	U		
2-Methylphenol	mg/L	0.014	U		
4-Methylphenol	mg/L	0.18			
Nitrobenzene	mg/L	0.00075	U		
Pentachlorophenol	mg/L	0.0012	U		
Pyridine	mg/L	0.0021	U		
2,4,5-Trichlorophenol	mg/L	0.0017	U		
2,4,6-Trichlorophenol	mg/L	0.0017	U		
Total Metals of TCLP in Hazardous Samples by ICAP					
Arsenic	mg/kg	125	U		
Barium	mg/kg	50	U		
Cadmium	mg/kg	25	U		
Chromium	mg/kg	25	U		
Lead	mg/kg	125	U		
Selenium	mg/kg	250	U		
Silver	mg/kg	25	U		
Total Semivolatiles of TCLP compounds in Hazardous Waste					
1,4-Dichlorobenzene	mg/kg	11.8	U		
2,4-Dinitrotoluene	mg/kg	9.1	U		
Hexachlorobenzene	mg/kg	13.6	U		
Hexachlorobutadiene	mg/kg	10.9	U		
Hexachloroethane	mg/kg	15	U		
2-Methylphenol	mg/kg	43.1	U		
4-Methylphenol	mg/kg	35.2	U		
Nitrobenzene	mg/kg	12.9	U		
Pentachlorophenol	mg/kg	24.1	U		
Pyridine	mg/kg	198	U		
2,4,5-Trichlorophenol	mg/kg	21.7	U		
2,4,6-Trichlorophenol	mg/kg	21.1	U		
TCLP Metals in Soil					

Analysis / Analyte	Units	100-__	101-__	101-FD	102-__
Arsenic	mg/L		5.0 K	5.0 K	
Barium	mg/L		100 K	100 K	
Cadmium	mg/L		1.0 K	1.0 K	
Chromium	mg/L		5.0 K	5.0 K	
Lead	mg/L		5.0 K	5.0 K	
Selenium	mg/L		1.0 K	1.0 K	
Silver	mg/L		5.0 K	5.0 K	
TCLP Semi-Volatiles in Soil					
1,4-Dichlorobenzene	mg/L		0.00064 U	0.00064 U	
2,4-Dinitrotoluene	mg/L		0.00073 U	0.00073 U	
Hexachlorobenzene	mg/L		0.0005 U	0.0005 U	
Hexachlorobutadiene	mg/L		0.00059 U	0.00059 U	
Hexachloroethane	mg/L		0.00071 U	0.00071 U	
2-Methylphenol	mg/L		0.0014 U	0.0014 U	
4-Methylphenol	mg/L		0.0013 U	0.0013 U	
Nitrobenzene	mg/L		0.00075 U	0.00075 U	
Pentachlorophenol	mg/L		0.0012 U	0.0012 U	
Pyridine	mg/L		0.0021 U	0.0021 U	
2,4,5-Trichlorophenol	mg/L		0.0017 U	0.0017 U	
2,4,6-Trichlorophenol	mg/L		0.0017 U	0.0017 U	
Total Metals Analysis of TCLP Metals in Soil by ICAP					
Arsenic	mg/kg		2.6 U	2.6 U	5.2
Barium	mg/kg		15	15.2	124
Cadmium	mg/kg		0.52 U	0.52 U	0.67 U
Chromium	mg/kg		5.5 U	4.2 U	11.4
Lead	mg/kg		3.1	6.1	27.6
Selenium	mg/kg		5.2 U	5.2 U	6.7 U
Silver	mg/kg		0.52 U	0.52 U	0.67 U
Total Semivolatiles of TCLP compounds in Solids					
1,4-Dichlorobenzene	ug/kg		200 U	200 U	26 U
2,4-Dinitrotoluene	ug/kg		160 U	160 U	20 U
Hexachlorobenzene	ug/kg		230 U	230 U	30 U
Hexachlorobutadiene	ug/kg		190 U	190 U	24 U
Hexachloroethane	ug/kg		260 U	260 U	33 U
2-Methylphenol	ug/kg		740 U	740 U	96 U
4-Methylphenol	ug/kg		610 U	610 U	78 U
Nitrobenzene	ug/kg		220 U	220 U	29 U
Pentachlorophenol	ug/kg		410 U	410 U	54 U
Pyridine	ug/kg		3400 U	3400 U	440 U
2,4,5-Trichlorophenol	ug/kg		370 U	370 U	48 U
2,4,6-Trichlorophenol	ug/kg		360 U	360 U	47 U

Analysis / Analyte	Units	205-__	208-__
Metals in Water by ICP			
Aluminum	ug/L	10900	100 U
Antimony	ug/L	20 U	20 U
Arsenic	ug/L	25 U	25 U
Barium	ug/L	86.3	30
Beryllium	ug/L	1 U	1 U
Cadmium	ug/L	5 U	5 U
Calcium	mg/L	12.7	48.6
Chromium	ug/L	13.6	5.2
Cobalt	ug/L	5 U	5 U
Copper	ug/L	10 U	10 U
Iron	ug/L	8980	50 U
Lead	ug/L	25 U	25 U
Magnesium	mg/L	6.4	26.7
Manganese	ug/L	130	5 U
Molybdenum	ug/L	10 U	10 U
Nickel	ug/L	15 U	15 U
Potassium	mg/L	3.6	2 U
Selenium	ug/L	50 U	50 U
Silver	ug/L	5 U	5 U
Sodium	mg/L	5.4	3.2
Thallium	ug/L	30 U	30 U
Titanium	ug/L	139	5 U
Vanadium	ug/L	23.8	5 U
Zinc	ug/L	22.9	72
pH of Water			
pH	SU	7.2	7.5
Semi-Volatile Organic Compounds in Water			
Acenaphthene	ug/L	0.16 U	0.16 U
Acenaphthylene	ug/L	0.2 U	0.2 U
Anthracene	ug/L	0.14 U	0.14 U
Benzo(a)anthracene	ug/L	0.099 U	0.099 U
Benzo(a)pyrene	ug/L	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	0.13 U	0.13 U
Benzo(g,h,i)perylene	ug/L	0.11 U	0.11 U
Benzo(k)fluoranthene	ug/L	0.12 U	0.12 U
Benzoic acid	ug/L	1.3 U	1.3 U
Benzyl alcohol	ug/L	0.96 U	0.96 U
bis(2-Chloroethoxy)methane	ug/L	0.32 U	0.32 U
bis(2-Chloroethyl)ether	ug/L	0.4 U	0.4 U
bis(2-Chloroisopropyl)ether	ug/L	0.33 U	0.33 U
bis(2-Ethylhexyl)phthalate	ug/L	0.83 U	0.83 U
4-Bromophenyl-phenylether	ug/L	0.35 U	0.35 U
Butylbenzylphthalate	ug/L	0.94 U	0.94 U
Carbazole	ug/L	2 U	2 U
4-Chloro-3-methylphenol	ug/L	1.2 U	1.2 U
4-Chloroaniline	ug/L	1.2 U	1.2 U
2-Chloronaphthalene	ug/L	0.69 U	0.69 U
2-Chlorophenol	ug/L	1.3 U	1.3 U

Analysis / Analyte	Units	205-__	208-__
4-Chlorophenyl-phenylether	ug/L	0.28 U	0.28 U
Chrysene	ug/L	0.11 U	0.11 U
Di-n-butylphthalate	ug/L	0.31 U	0.31 U
Di-n-octylphthalate	ug/L	0.31 U	0.31 U
Dibenz(a,h)anthracene	ug/L	0.13 U	0.13 U
Dibenzofuran	ug/L	0.6 U	0.6 U
1,2-Dichlorobenzene	ug/L	0.86 U	0.86 U
1,3-Dichlorobenzene	ug/L	0.54 U	0.54 U
1,4-Dichlorobenzene	ug/L	0.64 U	0.64 U
3,3'-Dichlorobenzidine	ug/L	1.4 U	1.4 U
2,4-Dichlorophenol	ug/L	1.2 U	1.2 U
Diethylphthalate	ug/L	0.3 U	0.3 U
2,4-Dimethylphenol	ug/L	1.5 U	1.5 U
Dimethylphthalate	ug/L	0.23 U	0.23 U
4,6-Dinitro-2-methylphenol	ug/L	2 U	2 U
2,4-Dinitrophenol	ug/L	2.4 U	2.4 U
2,4-Dinitrotoluene	ug/L	0.73 U	0.73 U
2,6-Dinitrotoluene	ug/L	0.89 U	0.89 U
Fluoranthene	ug/L	1.3	0.12 U
Fluorene	ug/L	0.17 U	0.17 U
Hexachlorobenzene	ug/L	0.5 U	0.5 U
Hexachlorobutadiene	ug/L	0.59 U	0.59 U
Hexachlorocyclopentadiene	ug/L	0.6 U	0.6 U
Hexachloroethane	ug/L	0.71 U	0.71 U
Indeno(1,2,3-cd)pyrene	ug/L	0.15 U	0.15 U
Isophorone	ug/L	0.81 U	0.81 U
2-Methylnaphthalene	ug/L	0.72 U	0.72 U
2-Methylphenol	ug/L	1.4 U	1.4 U
4-Methylphenol	ug/L	1.3 U	1.3 U
Naphthalene	ug/L	0.18 U	0.18 U
2-Nitroaniline	ug/L	0.78 U	0.78 U
3-Nitroaniline	ug/L	0.53 U	0.53 U
4-Nitroaniline	ug/L	0.86 U	0.86 U
Nitrobenzene	ug/L	0.75 U	0.75 U
2-Nitrophenol	ug/L	1.3 U	1.3 U
4-Nitrophenol	ug/L	1.4 U	1.4 U
N-nitroso-di-n-propylamine	ug/L	0.41 U	0.41 U
N-nitrosodiphenylamine	ug/L	0.33 U	0.33 U
Pentachlorophenol	ug/L	1.2 U	1.2 U
Phenanthrene	ug/L	0.11 U	0.11 U
Phenol	ug/L	1.1 U	1.1 U
Pyrene	ug/L	0.092 U	0.092 U
1,2,4-Trichlorobenzene	ug/L	0.7 U	0.7 U
2,4,5-Trichlorophenol	ug/L	1.7 U	1.7 U
2,4,6-Trichlorophenol	ug/L	1.7 U	1.7 U



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

ENVIRONMENTAL SERVICES DIVISION
REGION 7
25 FUNSTON ROAD
KANSAS CITY, KANSAS 66115

Date: MAY 24 2001

MEMORANDUM

SUBJECT: Data Transmittal for ASR #: 827

Site Description: Missouri Tie and Timber

FROM: ^{FSL} Dale Bates, Program Manager M. Simmons
Regional Laboratory, Environmental Services Division

TO: Dedriel Newsome
ENSU / ARCH

Attached is the data transmittal for the above referenced site. This is a Modified Data Transmittal; these data are modified and differ from data previously transmitted. If you have any questions or comments, please contact Dee Simmons at 551-5129.

Attachment

cc: Primary Data File

MODIFIED DATA: Data were modified for the following reason(s):

At The Project Leaders Request,
additional BNA parameters
are being reported in LIMs.

United States Environmental Protection Agency

Region 7 Laboratory
25 Funston Road
Kansas City, KS 66115

Date: 5/24/2001

Subject: Transmittal of Sample Analysis Results for ASR #: 827

Activity Number: DLN14

Activity Description: Missouri Tie and Timber

From: Michael Thomas, Associate Laboratory Director 
Regional Laboratory, Environmental Services Division

To: Dedriel Newsome
ENSV/ARCM

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cc: Analytical Data File

ASR Number: 827

Summary of Activity Information

4/6/2001

Activity Leader: Newsome, Dedriel

Org: ENSV/ARCM

Phone: (913) 551-7049

Activity Number: DLN14

Activity Desc: Missouri Tie and Timber

Location: Bunker

State: Missouri

Type: RCRA

Purpose: Enforcement

Explanation of Codes, Units and Qualifiers used on this report.

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Activity Number: DLN14

ASR Number: 827

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Activity Desc: Missouri Tie and Timber

4/6/2001

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101 - FD		Soil	T-Building wood storage area/Duplicate of sample 101		03/07/2001	14:00	03/07/2001	14:05	03/08/2001
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Analysis	Comments About Results For This Analysis
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Semi-Volatile Organic Compounds in Hazardous Waste

The compounds previously reported in the original transmittal under the "Total Semi-Volatiles of TCLP Compounds in Hazardous" are not reported again in this data set. See the original transmittal for these compounds and associated results.

As requested by the EPA Project Leader, the laboratory was requested to analyze the above samples for the complete list of routine BNA compounds after they had previously been analyzed, and data reported, for the totals of TCLP semivolatiles and TCLP semivolatiles. The laboratory proceeded with the analysis as requested. Although no data were qualified based on holding times, it is possible that the actual concentrations may have been higher than the reported results.

Semi-Volatile Organic Compounds in Soil

Sample 827-102 was not re-extracted with the other samples due to the fact that none of the target compounds exceeded the linearity in the initial analysis. The initial analysis of this sample (and all others) was analyzed in conjunction with a valid calibration for all target compounds. Therefore, the submitted data for this sample contained all target BNA compounds as requested. Also, the compounds previously reported in the original transmittal under the "Total Semi-Volatiles of TCLP Compounds in Solids" are not reported again in this data set. See the original transmittal for these compounds and associated results.

As requested by the EPA Project Leader, the laboratory was requested to analyze the above samples for the complete list of routine BNA compounds after they had previously been analyzed, and data reported, for the totals of TCLP semivolatiles and TCLP semivolatiles. The laboratory proceeded with the analysis as requested. Although no data were qualified based on holding times, it is possible that the actual concentrations may have been higher than the reported results.

Due to matrix interferences and very high native concentrations, MS/MSD recoveries of the phenolic compounds ranged from 0% - 7%. Based on the nature of the samples and the observed MS/MSD results, it is possible that the reported results for the phenolic compounds may be biased low.

TCLP Semi-Volatiles in Hazardous

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3-methylphenol is not reported individually.

TCLP Semi-Volatiles in Soil

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3-methylphenol is not reported individually.

Total Metals Analysis of TCLP Metals in Soil by ICAP

Slight chromium contamination was found in the laboratory method blank. Only samples containing this compound at a level greater than five times the contamination level of the blank are reported without being qualified. All samples that contained this compound but at a level less than five times the contamination in the blank have the result "U-coded" indicating the method reporting limit has been raised to the level found in the sample. Samples affected were 827-101 and 827-101FD.

Total Semivolatiles of TCLP compounds in Hazardous Waste

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3-methylphenol is not reported individually.

Total Semivolatiles of TCLP compounds in Solids

The laboratory reported 3-methylphenol and 4-methylphenol as an isomer pair. As a result, 3-methylphenol is not reported individually.

Analysis / Analyte	Units	100-__	101-__	101-FD	102-__
Flashpoint of Hazardous Samples					
Flashpoint	Deg C	79	L		
pH of Hazardous Sample					
pH	SU	6.7			
Semi-Volatile Organic Compounds in Hazardous Waste					
Acenaphthene	mg/kg	10670			
Acenaphthylene	mg/kg	64.6			
Anthracene	mg/kg	14710			
Benzo(a)anthracene	mg/kg	3130			
Benzo(a)pyrene	mg/kg	957			
Benzo(b)fluoranthene	mg/kg	1070			
Benzo(g,h,i)perylene	mg/kg	233			
Benzo(k)fluoranthene	mg/kg	983			
Benzoic acid	mg/kg	149	U		
Benzyl alcohol	mg/kg	49.8	U		
bis(2-Chloroethoxy)methane	mg/kg	16.8	U		
bis(2-Chloroethyl)ether	mg/kg	14.9	U		
bis(2-Chloroisopropyl)ether	mg/kg	21.8	U		
bis(2-Ethylhexyl)phthalate	mg/kg	18.8	U		
4-Bromophenyl-phenylether	mg/kg	13.2	U		
Butylbenzylphthalate	mg/kg	14.1	U		
Carbazole	mg/kg	11650			
4-Chloro-3-methylphenol	mg/kg	35.3	U		
4-Chloroaniline	mg/kg	53	U		
2-Chloronaphthalene	mg/kg	25.4	U		
2-Chlorophenol	mg/kg	63.3	U		
4-Chlorophenyl-phenylether	mg/kg	15.3	U		
Chrysene	mg/kg	3770			
Di-n-butylphthalate	mg/kg	17.6	U		
Di-n-octylphthalate	mg/kg	15.9	U		
Dibenz(a,h)anthracene	mg/kg	8.1	U		
Dibenzofuran	mg/kg	8300			
1,2-Dichlorobenzene	mg/kg	33.8	U		
1,3-Dichlorobenzene	mg/kg	36.5	U		
3,3'-Dichlorobenzidine	mg/kg	186	U		
2,4-Dichlorophenol	mg/kg	55.5	U		
Diethylphthalate	mg/kg	11.6	U		
2,4-Dimethylphenol	mg/kg	296	U		
Dimethylphthalate	mg/kg	6.6	U		
4,6-Dinitro-2-methylphenol	mg/kg	63.9	U		
2,4-Dinitrophenol	mg/kg	112	U		
2,6-Dinitrotoluene	mg/kg	33.9	U		
Fluoranthene	mg/kg	22330			
Fluorene	mg/kg	14240			
Hexachlorocyclopentadiene	mg/kg	28.5	U		
Indeno(1,2,3-cd)pyrene	mg/kg	264			
Isophorone	mg/kg	27.6	U		
2-Methylnaphthalene	mg/kg	2080			
Naphthalene	mg/kg	4170			

Activity Number: DLN14

ASR Number: 827

RLAB Approved Sample Analysis Results

Activity Desc: Missouri Tie and Timber

4/6/2001

Analysis / Analyte	Units	100-__	101-__	101-FD	102-__
2-Nitroaniline	mg/kg	29.9 U			
3-Nitroaniline	mg/kg	71.9 U			
4-Nitroaniline	mg/kg	66.3 U			
2-Nitrophenol	mg/kg	50.4 U			
4-Nitrophenol	mg/kg	61.1 U			
N-nitroso-di-n-propylamine	mg/kg	24.8 U			
N-nitrosodiphenylamine	mg/kg	13.1 U			
Phenanthrene	mg/kg	53280			
Phenol	mg/kg	57.6 U			
Pyrene	mg/kg	15690			
1,2,4-Trichlorobenzene	mg/kg	24.5 U			
TCLP Metals in Haz. Waste					
Arsenic	mg/L	0.025 U			
Barium	mg/L	0.08			
Cadmium	mg/L	0.005 U			
Chromium	mg/L	0.005 U			
Lead	mg/L	0.025 U			
Selenium	mg/L	0.05 U			
Silver	mg/L	0.005 U			
TCLP Semi-Volatiles in Hazardous					
1,4-Dichlorobenzene	mg/L	0.00064 U			
2,4-Dinitrotoluene	mg/L	0.00073 U			
Hexachlorobenzene	mg/L	0.0005 U			
Hexachlorobutadiene	mg/L	0.00059 U			
Hexachloroethane	mg/L	0.00071 U			
2-Methylphenol	mg/L	0.014 U			
4-Methylphenol	mg/L	0.18			
Nitrobenzene	mg/L	0.00075 U			
Pentachlorophenol	mg/L	0.0012 U			
Pyridine	mg/L	0.0021 U			
2,4,5-Trichlorophenol	mg/L	0.0017 U			
2,4,6-Trichlorophenol	mg/L	0.0017 U			
Total Metals of TCLP in Hazardous Samples by ICAP					
Arsenic	mg/kg	125 U			
Barium	mg/kg	50 U			
Cadmium	mg/kg	25 U			
Chromium	mg/kg	25 U			
Lead	mg/kg	125 U			
Selenium	mg/kg	250 U			
Silver	mg/kg	25 U			
Total Semivolatiles of TCLP compounds in Hazardous Waste					
Pyridine	mg/kg	198 U			
Semi-Volatile Organic Compounds in Soil					
Acenaphthene	ug/kg		117000	86500	7.2 U
Acenaphthylene	ug/kg		3020 U	3020 U	5.2 U
Anthracene	ug/kg		127000	99200	4.9 U
Benzo(a)anthracene	ug/kg		50200	38400	3.7 U
Benzo(a)pyrene	ug/kg		2940 U	2940 U	5.1 U

Activity Number: DLN14

ASR Number: 827

RLAB Approved Sample Analysis Results

Activity Desc: Missouri Tie and Timber

4/6/2001

Analysis / Analyte	Units	100-__	101-__	101-FD	102-__
Benzo(b)fluoranthene	ug/kg		4720 U	4720 U	8.1 U
Benzo(g,h,i)perylene	ug/kg		3870 U	3870 U	6.7 U
Benzo(k)fluoranthene	ug/kg		3940 U	3940 U	6.8 U
Benzoic acid	ug/kg		76500 U	76500 U	132 U
Benzyl alcohol	ug/kg		25700 U	25700 U	44.3 U
bis(2-Chloroethoxy)methane	ug/kg		8660 U	8660 U	14.9 U
bis(2-Chloroethyl)ether	ug/kg		7650 U	7650 U	13.2 U
bis(2-Chloroisopropyl)ether	ug/kg		11200 U	11200 U	19.3 U
bis(2-Ethylhexyl)phthalate	ug/kg		9660 U	9660 U	16.7 U
4-Bromophenyl-phenylether	ug/kg		6800 U	6800 U	11.7 U
Butylbenzylphthalate	ug/kg		7270 U	7270 U	12.5 U
Carbazole	ug/kg		86400	60700	78.7 U
4-Chloro-3-methylphenol	ug/kg		18200 U	18200 U	31.3 U
4-Chloroaniline	ug/kg		27300 U	27300 U	47.1 U
2-Chloronaphthalene	ug/kg		13100 U	13100 U	22.5 U
2-Chlorophenol	ug/kg		32600 U	32600 U	56.3 U
4-Chlorophenyl-phenylether	ug/kg		7890 U	7890 U	13.6 U
Chrysene	ug/kg		70500	62200	4.3 U
Di-n-butylphthalate	ug/kg		9050 U	9050 U	15.6 U
Di-n-octylphthalate	ug/kg		8200 U	8200 U	14.1 U
Dibenz(a,h)anthracene	ug/kg		4180 U	4180 U	7.2 U
Dibenzofuran	ug/kg		64300	37100	22.4 U
1,2-Dichlorobenzene	ug/kg		17400 U	17400 U	30 U
1,3-Dichlorobenzene	ug/kg		18800 U	18800 U	32.4 U
3,3'-Dichlorobenzidine	ug/kg		95900 U	95900 U	165 U
2,4-Dichlorophenol	ug/kg		28600 U	28600 U	49.3 U
Diethylphthalate	ug/kg		5950 U	5950 U	10.3 U
2,4-Dimethylphenol	ug/kg		152000 U	152000 U	263 U
Dimethylphthalate	ug/kg		3400 U	3400 U	5.9 U
4,6-Dinitro-2-methylphenol	ug/kg		32900 U	32900 U	56.8 U
2,4-Dinitrophenol	ug/kg		57700 U	57700 U	99.5 U
2,6-Dinitrotoluene	ug/kg		17500 U	17500 U	30.1 U
Fluoranthene	ug/kg		363000	297000	106
Fluorene	ug/kg		159000	120000	6.5 U
Hexachlorocyclopentadiene	ug/kg		14700 U	14700 U	25.3 U
Indeno(1,2,3-cd)pyrene	ug/kg		2550 U	2550 U	4.4 U
Isophorone	ug/kg		14200 U	14200 U	24.5 U
2-Methylnaphthalene	ug/kg		13400 U	13400 U	23.1 U
Naphthalene	ug/kg		3250 U	3250 U	5.6 U
2-Nitroaniline	ug/kg		15400 U	15400 U	26.5 U
3-Nitroaniline	ug/kg		37000 U	37000 U	63.9 U
4-Nitroaniline	ug/kg		34200 U	34200 U	58.9 U
2-Nitrophenol	ug/kg		26000 U	26000 U	44.8 U
4-Nitrophenol	ug/kg		31500 U	31500 U	54.3 U
N-nitroso-di-n-propylamine	ug/kg		12800 U	12800 U	22 U
N-nitrosodiphenylamine	ug/kg		6730 U	6730 U	11.6 U
Phenanthrene	ug/kg		648000	486000	195
Phenol	ug/kg		29700 U	29700 U	51.2 U
Pyrene	ug/kg		277000	233000	75
1,2,4-Trichlorobenzene	ug/kg		12600 U	12600 U	21.7 U

Analysis / Analyte	Units	100-__	101-__	101-FD	102-__
TCLP Metals in Soil					
Arsenic	mg/L		5.0 K	5.0 K	
Barium	mg/L		100 K	100 K	
Cadmium	mg/L		1.0 K	1.0 K	
Chromium	mg/L		5.0 K	5.0 K	
Lead	mg/L		5.0 K	5.0 K	
Selenium	mg/L		1.0 K	1.0 K	
Silver	mg/L		5.0 K	5.0 K	
TCLP Semi-Volatiles in Soil					
1,4-Dichlorobenzene	mg/L		0.00064 U	0.00064 U	
2,4-Dinitrotoluene	mg/L		0.00073 U	0.00073 U	
Hexachlorobenzene	mg/L		0.0005 U	0.0005 U	
Hexachlorobutadiene	mg/L		0.00059 U	0.00059 U	
Hexachloroethane	mg/L		0.00071 U	0.00071 U	
2-Methylphenol	mg/L		0.0014 U	0.0014 U	
4-Methylphenol	mg/L		0.0013 U	0.0013 U	
Nitrobenzene	mg/L		0.00075 U	0.00075 U	
Pentachlorophenol	mg/L		0.0012 U	0.0012 U	
Pyridine	mg/L		0.0021 U	0.0021 U	
2,4,5-Trichlorophenol	mg/L		0.0017 U	0.0017 U	
2,4,6-Trichlorophenol	mg/L		0.0017 U	0.0017 U	
Total Metals Analysis of TCLP Metals in Soil by ICAP					
Arsenic	mg/kg		2.6 U	2.6 U	5.2
Barium	mg/kg		15	15.2	124
Cadmium	mg/kg		0.52 U	0.52 U	0.67 U
Chromium	mg/kg		5.5 U	4.2 U	11.4
Lead	mg/kg		3.1	6.1	27.6
Selenium	mg/kg		5.2 U	5.2 U	6.7 U
Silver	mg/kg		0.52 U	0.52 U	0.67 U
Total Semivolatiles of TCLP compounds in Solids					
1,4-Dichlorobenzene	ug/kg		200 U	200 U	26 U
2,4-Dinitrotoluene	ug/kg		160 U	160 U	20 U
Hexachlorobenzene	ug/kg		230 U	230 U	30 U
Hexachlorobutadiene	ug/kg		190 U	190 U	24 U
Hexachloroethane	ug/kg		260 U	260 U	33 U
2-Methylphenol	ug/kg		740 U	740 U	96 U
4-Methylphenol	ug/kg		610 U	610 U	78 U
Nitrobenzene	ug/kg		220 U	220 U	29 U
Pentachlorophenol	ug/kg		410 U	410 U	54 U
Pyridine	ug/kg		3400 U	3400 U	440 U
2,4,5-Trichlorophenol	ug/kg		370 U	370 U	48 U
2,4,6-Trichlorophenol	ug/kg		360 U	360 U	47 U

Analysis / Analyte	Units	205-__	208-__
Metals in Water by ICP			
Aluminum	ug/L	10900	100 U
Antimony	ug/L	20 U	20 U
Arsenic	ug/L	25 U	25 U
Barium	ug/L	86.3	30
Beryllium	ug/L	1 U	1 U
Cadmium	ug/L	5 U	5 U
Calcium	mg/L	12.7	48.6
Chromium	ug/L	13.6	5.2
Cobalt	ug/L	5 U	5 U
Copper	ug/L	10 U	10 U
Iron	ug/L	8980	50 U
Lead	ug/L	25 U	25 U
Magnesium	mg/L	6.4	26.7
Manganese	ug/L	130	5 U
Molybdenum	ug/L	10 U	10 U
Nickel	ug/L	15 U	15 U
Potassium	mg/L	3.6	2 U
Selenium	ug/L	50 U	50 U
Silver	ug/L	5 U	5 U
Sodium	mg/L	5.4	3.2
Thallium	ug/L	30 U	30 U
Titanium	ug/L	139	5 U
Vanadium	ug/L	23.8	5 U
Zinc	ug/L	22.9	72
pH of Water			
pH	SU	7.2	7.5
Semi-Volatile Organic Compounds in Water			
Acenaphthene	ug/L	0.16 U	0.16 U
Acenaphthylene	ug/L	0.2 U	0.2 U
Anthracene	ug/L	0.14 U	0.14 U
Benzo(a)anthracene	ug/L	0.099 U	0.099 U
Benzo(a)pyrene	ug/L	0.1 U	0.1 U
Benzo(b)fluoranthene	ug/L	0.13 U	0.13 U
Benzo(g,h,i)perylene	ug/L	0.11 U	0.11 U
Benzo(k)fluoranthene	ug/L	0.12 U	0.12 U
Benzoic acid	ug/L	1.3 U	1.3 U
Benzyl alcohol	ug/L	0.96 U	0.96 U
bis(2-Chloroethoxy)methane	ug/L	0.32 U	0.32 U
bis(2-Chloroethyl)ether	ug/L	0.4 U	0.4 U
bis(2-Chloroisopropyl)ether	ug/L	0.33 U	0.33 U
bis(2-Ethylhexyl)phthalate	ug/L	0.83 U	0.83 U
4-Bromophenyl-phenylether	ug/L	0.35 U	0.35 U
Butylbenzylphthalate	ug/L	0.94 U	0.94 U
Carbazole	ug/L	2 U	2 U
4-Chloro-3-methylphenol	ug/L	1.2 U	1.2 U
4-Chloroaniline	ug/L	1.2 U	1.2 U
2-Chloronaphthalene	ug/L	0.69 U	0.69 U
2-Chlorophenol	ug/L	1.3 U	1.3 U

Activity Number: DLN14

ASR Number: 827

RLAB Approved Sample Analysis Results

Activity Desc: Missouri Tie and Timber

4/6/2001

Analysis / Analyte	Units	205-__	208-__
4-Chlorophenyl-phenylether	ug/L	0.28 U	0.28 U
Chrysene	ug/L	0.11 U	0.11 U
Di-n-butylphthalate	ug/L	0.31 U	0.31 U
Di-n-octylphthalate	ug/L	0.31 U	0.31 U
Dibenz(a,h)anthracene	ug/L	0.13 U	0.13 U
Dibenzofuran	ug/L	0.6 U	0.6 U
1,2-Dichlorobenzene	ug/L	0.86 U	0.86 U
1,3-Dichlorobenzene	ug/L	0.54 U	0.54 U
1,4-Dichlorobenzene	ug/L	0.64 U	0.64 U
3,3'-Dichlorobenzidine	ug/L	1.4 U	1.4 U
2,4-Dichlorophenol	ug/L	1.2 U	1.2 U
Diethylphthalate	ug/L	0.3 U	0.3 U
2,4-Dimethylphenol	ug/L	1.5 U	1.5 U
Dimethylphthalate	ug/L	0.23 U	0.23 U
4,6-Dinitro-2-methylphenol	ug/L	2 U	2 U
2,4-Dinitrophenol	ug/L	2.4 U	2.4 U
2,4-Dinitrotoluene	ug/L	0.73 U	0.73 U
2,6-Dinitrotoluene	ug/L	0.89 U	0.89 U
Fluoranthene <i>W120</i>	ug/L	1.3	0.12 U
Fluorene	ug/L	0.17 U	0.17 U
Hexachlorobenzene	ug/L	0.5 U	0.5 U
Hexachlorobutadiene	ug/L	0.59 U	0.59 U
Hexachlorocyclopentadiene	ug/L	0.6 U	0.6 U
Hexachloroethane	ug/L	0.71 U	0.71 U
Indeno(1,2,3-cd)pyrene	ug/L	0.15 U	0.15 U
Isophorone	ug/L	0.81 U	0.81 U
2-Methylnaphthalene	ug/L	0.72 U	0.72 U
2-Methylphenol	ug/L	1.4 U	1.4 U
4-Methylphenol	ug/L	1.3 U	1.3 U
Naphthalene	ug/L	0.18 U	0.18 U
2-Nitroaniline	ug/L	0.78 U	0.78 U
3-Nitroaniline	ug/L	0.53 U	0.53 U
4-Nitroaniline	ug/L	0.86 U	0.86 U
Nitrobenzene	ug/L	0.75 U	0.75 U
2-Nitrophenol	ug/L	1.3 U	1.3 U
4-Nitrophenol	ug/L	1.4 U	1.4 U
N-nitroso-di-n-propylamine	ug/L	0.41 U	0.41 U
N-nitrosodiphenylamine	ug/L	0.33 U	0.33 U
Pentachlorophenol	ug/L	1.2 U	1.2 U
Phenanthrene	ug/L	0.11 U	0.11 U
Phenol	ug/L	1.1 U	1.1 U
Pyrene	ug/L	0.092 U	0.092 U
1,2,4-Trichlorobenzene	ug/L	0.7 U	0.7 U
2,4,5-Trichlorophenol	ug/L	1.7 U	1.7 U
2,4,6-Trichlorophenol	ug/L	1.7 U	1.7 U